

The invention relates to a method of producing nanostructures in membranes, in which method a membrane consisting of a polymer material is irradiated with charged particles, especially ions, to produce particle tracks. The particle tracks in the membrane are etched using an etching liquid and the etching operation is stopped using a stop liquid, in such a manner that asymmetrical structures are formed. Polyimide is used as the membrane material.

(Fig. 2)